Correspondence

TO THE EDITOR, *Genitourinary Medicine*

Erythromycin for four or seven days against chlamydia trachomatis

Sir,

We recently found that *Chlamydia trachomatis* cannot be cultured from the genital tract four days after the start of treatment with erythromycin 1 g daily,[1] which suggested that a shorter treatment regimen should be evaluated.

In this study we therefore compared the effect of erythromycin 500 mg twice daily for four days followed by placebo tablets twice daily for three days with erythromycin 500 mg twice daily for seven days. It was a double blind study of 55 men and 44 women with chlamydia positive cultures from the genitourinary tract.

The results were evaluable in 73 chlamydia positive patients (42 men 31 women) who returned for follow up visits on days 7 and 14, claimed to have taken the full course of treatment, and denied the possibility of reinfection. All patients had negative cultures for *Neisseria gonorrhoeae*.

As shown in the table, the overall bacteriological cure rate of the seven day treatment was higher than that of the four day treatment (98% compared with 81% at the first follow up visit and 88% compared with 54% at the second follow up visit ($p<0.0005$)). The same differences in the bacteriological cure rates between the seven and the four day treatments were found when considering men and women separately (95% compared with 80% of men were cured at the first follow up visit and 77% compared with a 40% at the second ($p<0.05$), and 100% compared with 85% of women were cured at the first follow up and 100% compared with 54% at the second ($p<0.01$)).

It can be concluded from this study that a treatment schedule with 500 mg erythromycin twice daily for four days is not sufficient. The study, however, confirms the findings of several other studies that erythromycin is an effective antimicrobial agent against *C trachomatis*,[2-5] as the overall bacteriological cure rate was 88% after the seven days' treatment. The bacteriological cure rate of this treatment was higher in women than in men, but the difference was not significant ($p>0.1$). Effective treatment of chlamydial infections in women is important as the sequelae are severe. Other studies, including those of non-pregnant chlamydia positive women, have also found that erythromycin 1 g daily for seven days is highly effective.[4,6] In contrast to tetracycline, erythromycin is considered to be safe throughout pregnancy and could therefore be an important treatment of chlamydial infections during pregnancy, though there is insufficient information about the optimum dose and duration of treatment. Many studies concerning the treatment of chlamydial infections do not include both men and women. In a few studies, however, there was an equal and high cure rate of more than 90% in both men and women after treatment with erythromycin 1 g daily for one week[3] or erythromycin 2 g daily for three weeks.[7]

TABLE *Bacteriological results in 73 patients with uncomplicated genitourinary Chlamydia trachomatis infections after treatment with erythromycin 500 mg twice daily for seven or four days*

	Treatment 7 days			Treatment 4 days		
	Men (n = 22)	Women (n = 18)	Total (n = 40)	Men (n = 20)	Women (n = 13)	Total (n = 33)
No (%) culture negative on:						
Day 7	21 (95)	18 (100)	39 (98)	16 (80)	11 (85)	27 (82)
Day 14	17 (77)	18 (100)	35 (88)	8 (40)	7 (54)	15 (45)
Significance	*	**	***	*	**	***

*$p<0.05$; **$p<0.01$; ***$p<0.0005$

The results of treatment for a sexually transmitted disease depend on the compliance of the patients, the possibility of reinfection, and an optimum treatment regimen. All these causes may theoretically explain the apparently better efficacy of erythromycin 500 mg twice daily for seven days in women than in men in our study.

Yours faithfully,

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TO THE EDITOR, *Genitourinary Medicine*

Sodium polyanethol sulphonate discs to identify *Gardnerella vaginalis*

Sir,

Reimer and Reller recently described the use of sodium polyanethol sulphonate (SPS) discs in identifying *Gardnerella vaginalis*.[1] They tested several species of bacteria, including 62 strains of *G vaginalis*, and compared the SPS test with inhibition by *Streptococcus sanguis*, hippurate hydrolysis, and the production of β haemolysis on V agar.

TABLE *Comparison of sodium polyanethol sulphonate (SPS) with other methods of identifying Gardnerella vaginalis in 83 vaginal specimens*

Organisms	No	Typical G vaginalis morphology	Positive catalase test	Inhibition by: Hydrogen peroxide	Inhibition by: SPS
G vaginalis	41	41	0	41	31
"*G vaginalis* like"*	19	0	0	19	8
Vaginal "diphtheroids"	16	0	16	16	0
Vaginal lactobacilli	7	0	0	7	0

*These organisms were of atypical Gram stain morphology.

They found that all strains previously identified as *G vaginalis* were inhibited by SPS and by *Str sanguis:* none of the other species tested was inhibited by both. They concluded that inhibition by SPS and *Str sanguis*, along with typical colony and Gram stain morphology and negative catalase and oxidase tests, provided excellent identification of *G vaginalis*.

I too have tested this compound (Liquoid, Roche Ltd) against organisms isolated from vaginal specimens, in conjunction with my routine methods of identification.[2] My results are shown in the table.

Unlike Reimer and Reller, I found that only 76% of *G vaginalis* organisms were inhibited by SPS, which, although it helped to exclude catalase positive vaginal coryneforms and lactobacilli, did nothing to improve the identification of *G vaginalis* and its differentiation from the atypical "*G vaginalis* like" organisms often found in bacterial vaginosis.

I also compared the easier, direct application of a loopful of 5% SPS on to seeded lawns of organisms under test, and found it to be as effective as prepared discs in producing zones of growth inhibition. The SPS solution proved to be stable for up to two months in a refrigerator, and obviated the chore of manufacturing discs.

Yours faithfully,

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TO THE EDITOR, *Genitourinary Medicine*

Analysis of questionnaires completed by some participants at the 2nd international conjoint meeting held in June 1984 in Montreal

Sir,

Readers who attended the 2nd international conjoint STD meeting in June 1984 in Montreal may remember the survey questionnaire that was handed out to all participants. The purpose of the survey was to obtain information on them and on their opinions relative to sexually transmitted diseases (STDs).

Two hundred and sixty three completed questionnaires were returned, giving a response rate of about 22%. Of the respondents, 61% were men; 44% were aged less than 35 years and 86% less than 50; 82% were heterosexual; 62% were married; 37% came from Québec, 16% from the rest of Canada, 29% from the USA, and 12% from Europe; 31% were Protestant and 53% Catholic; 11% were nurses, 27% general practitioners, and 45% medical specialists.

Some non-respondents, in discussions with us, questioned the pertinence of such a survey of opinions at a scientific meeting, a view that was perhaps shared by other non-respondents. We believe that some of the survey findings bear on this point, granting that great caution must be exercised in interpreting the results of a study with such a low response rate.

Sixty two variables were measured by the questionnaire, between which 183 associations were tested by χ^2 analysis, setting the significance level at $p = 0{\cdot}00027$ $(= 0{\cdot}05 \div 183)$. Many associations were detected that were either expected or at least not surprising, such as sex and profession, homosexuality and being single, and number of sexual partners and a history of STD. More interesting are the results related to the three attitude scales pertaining to: (1) the perceived effectiveness of medical intervention for STD, (2) the perceived contributions of individuals to their STD problems through their own behaviour, and (3) the STD problem as a moral issue. Each attitude was measured by a 6 to 10 item Likert type scale; at the analysis stage, some items were deleted from the scales because of poor correlations with the total score for their scale. The adjusted scores for the first two scales showed no significant associations with any other variable. The third scale did.

In its final form, this scale contains the following statements, about each of which the respondent had to express his degree of agreement or disagreement, on a scale of 1 to 5: (1) "the incidence of STD is an indication of the weakening of social values", (2) "the problem of STD is basically a moral problem", (3) "society has the right to treat a person with an STD against his or her will", (4) "no patient with an STD should be forced to disclose the names of his or her sexual partners", and (5) "it is useless to blame patients with an STD for their behaviour."

A high score on this scale, indicating a moralistic attitude, was significantly associated with being Catholic and with working in research and (almost significantly) with being aged 30 or older and with not being a general practitioner. On discriminant analysis, the most important independent predictors of a moralistic attitude were: being a Catholic, being heterosexual, working in research, and not being a general practitioner.

We find it intriguing that the only non-trivial findings of the survey should be an association between the respondents' moral attitude toward STD and some of their personal characteristics. Being a professional concerned with STD apparently does not obliterate the moral attitudes related to one's background. How these attitudes influence the professional's behaviour is an important question, which our unpretentious survey cannot answer.

Yours faithfully,

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